
VIRTAMOVE

**SHOULD I
CONTAINERIZE
A LEGACY APP?**

EBOOK

Introduction

All applications need to evolve and move forward. There's a lot of recent tech press coverage about containers. It's almost "all containers, all the time." Many legacy applications can be containerized. The question is, when should you containerize for your business-critical legacy app? Where does it make sense and where doesn't it provide the path forward for your old app? Remember, "just because you can, doesn't always mean you should."

When does containerization make the most sense?

VM-based workloads

Containers may be an option for VM-based scenarios, where you can "lift and shift" workloads to containers on VMs in the cloud. Entire VMs are "lifted" from the existing environments and "shifted" as-is to a new hosting premises. The downsides are that it's costly and time consuming. Shifting entire VMs moves app clutter along with important business workloads. After the shift, taking advantage of the native cloud management requires significant refactoring. It can also be costly. The long-term remediation, improvement, and viability of the legacy app is still a challenge. The application still needs to be remediated, redesigned, recoded, and repurposed for the specific cloud use cases and platforms.

Microservices-based apps

Microservices-based applications are well suited for container adoption. Container-based systems can be an effective way to develop, deploy, and manage microservices at scale. With their promise of portability and scalability, containers can be beneficial to organizations moving applications to the cloud or building net-new in the cloud. Containers may make sense for Linux shops that are considering Red Hat OpenShift. The platform offers a cloud foundation for building, deploying, and scaling new, cloud-enabled microservices.

"Not all apps are right for the cloud and not all apps are perfect candidates for containerizing and service enabling."

Should all apps be containerized?

Not all apps are right for the cloud and not all apps are perfect candidates for containerizing and service enabling. Examples of poor candidates are:

- Old apps built using proprietary languages or technologies. Think of apps with a dependency on a special hardware architecture, such as mainframes. It might be more economical to rebuild these in the cloud.
- Apps that will require a complete rework. Converting your legacy app to a microservices infrastructure requires a complete rethink of the infrastructure, and not every IT department will have the budget, resources, or time to do that.

Did you know?

The application changes needed to leverage containerization - whether you are transforming an existing legacy app or building net-new apps that are container oriented - might be about 35 percent more than traditional app dev costs.

What about monolithic legacy apps?

What if you don't have the luxury of starting a greenfield software project? What if your app is a legacy monolithic app? Containers work best when the application architecture is developed to be containerized from the outset.

Perhaps you can't redesign your legacy app to make it container-friendly, and you really need to preserve the current state of the legacy application, which includes all the configurations and patches you've applied over years of use.

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An alternative strategy for legacy apps

You could consider an alternative strategy for legacy apps: an automated, stateful re-install on a modern server and host OS. VirtaMove decouples a legacy app from an outdated OS. The software captures app dependencies as well as its current state, and runs the app natively on a modern host Windows OS or in a Windows or Linux Container Core OS. There's no need for install scripts or the original source code

An automated, stateful re-install closes known security exposures on old Oses, improves performance, and extends the useful life of a legacy app.

Extending the life of legacy apps

Using VirtaMove, a stateful re-install on a new server and a new host OS can extend the useful life of your legacy app by years. You can still make progress with your IT plans – reduce operational risk with a modest infrastructure investment, while enhancing performance and other efficiencies – and plan for big changes for the long-term benefit of your organization. It's a net win, for a modest investment of money, time, and effort.

As a migration partner, VirtaMove has extended the life cycle of thousands of legacy apps for hundreds of customers. If you need to shift forward with your legacy Microsoft Windows Server and Linux applications, give us a call. We're pleased to share what we know.

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About VirtaMove

VirtaMove subscription-based software moves legacy server applications to new cloud or datacenter servers in a fraction of the time and cost associated with traditional migration methods. Install scripts and source code not required. Encapsulating Windows Server and Linux applications in VM/OS-free moving containers, VirtaMove's patented software provides an automated, stateful re-install of most complex server applications. VirtaMove allows you to modernize your infrastructure, moving from an old, unsupported OS to a newer one with automation – modernize and move forward to a new datacenter server or cloud in one step. Reach out to us at info@virtamove.com to check out our website www.virtamove.com to learn more.